Deep South Center for Occupational Health & Safety

Summary Annual Report July 1, 2008 – June 30, 2009

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THE DEEP SOUTH CENTER FOR OCCUPATIONAL HEALTH & SAFETY

A NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY & HEALTH EDUCATION & RESEARCH CENTER

THE UNIVERSITY OF ALABAMA AT BIRMINGHAM AUBURN UNIVERSITY THE UNIVERSITY OF ALABAMA







Three great Institutions, one Mission - one Vision.

Introduction

The Deep South Education and Research Center is a consortium of programs at the three major universities in the state of Alabama:

The University of Alabama at Birmingham (UAB), Auburn University (AU), and The University of Alabama (UA).

The Center's Administrative Core is located at the UAB School of Public Health with the core academic programs of the ERC including:

- Industrial Hygiene (IH), directed by Dr. Claudiu Lungu, also at the UAB School of Public Health.
- Occupational Health Nursing (OHN), directed by Dr. Karen Heaton, at the UAB School of Nursing,
- Occupational Safety and Ergonomics (OSE), directed by Dr. Jerry Davis, at the AU Samuel Ginn College of Engineering.

The Center also incorporates three allied: the Hazardous Substance Academic Training (HSAT) program that is associated with the IH program, also directed by Dr. Lungu; the Occupational Injury Prevention Research Training (OIPRT) program that is associated with the OSE program, directed by Dr. Richard Sesek; and the Agricultural Safety and Health program in the College of Community Health Sciences at UA directed by Dr. John Wheat. The Continuing Education (CE) and Hazardous Substance Training (HST) programs are directed by Dr. Elizabeth Maples. A NORA research training program, directed by Dr. Brown of the UAB School of Nursing, is being conducted through OHN.

The Administrative Core includes Dr. Riedar K. Oestenstad, the Center Director, Dr. Maples, the Deputy Director, support staff, an Executive Committee, and an external Board of Advisors. It incorporates the Outreach and Diversity, directed by Dr. Maples, Pilot Project Research Training (PPRT), directed by Dr. Ed Postlethwait, and Interdisciplinary Coordination. The Executive Committee includes the Center Director, Deputy Director and all of the Program Directors. The committee meets at least quarterly to review progress in achieving program goals, student progress, plan short-term Center activities, and conduct long-term strategic planning. The Board of Advisors includes representatives from all of the occupational safety and health disciplines, government agencies and labor unions, from all of the states in our region.

Major Accomplishments

A significant Outreach effort was the second annual *Summer Institute in Occupational and Environmental Safety and Health* for undergraduate students. Eleven students from eight institutions attended the 2009 Institute. They came from diverse undergraduate backgrounds such as biology, chemistry, industrial hygiene, occupational safety and health technology, health science and pre-med. The students attended four days of sessions on a variety of topics and all showed an eagerness to learn and to participate in activities. Sessions were lead by safety and health practitioners, graduate students and faculty. Speakers were from industry, academia, government agencies and non-profits.

The Diversity program maintains a database on Historically Black College and Universities (HBCUs) in our region. The HBCU database is used to invite college and university faculty and students to annual research days and symposium in our region as well as inform them about

the PPRT funding opportunities, and admissions requirement for the academic program. Six of the eleven students that attended the 2nd *Summer Institute in Environmental and Occupational Safety and Health* were from minority groups.

Interdisciplinary activities continue to be an important Center priority, and all of the Center's Program Directors are involved in these activities. The Center's Board of Advisors has an interdisciplinary composition with representatives from all of the occupational safety and health core disciplines and individuals from industry, academia, government agencies and labor. The primary methods of achieving interdisciplinary interaction among students in Center programs include courses common to all academic programs, workplace evaluation field trips, seminars, research projects, and clinical activities. Interdisciplinary experiences are also available through the CE Program. The highlight interdisciplinary coursework are the two worksite evaluation courses: ENH 680 - Interdisciplinary Field Studies that is offered every fall semester, and ENH 681 - Interdisciplinary Worksite Evaluations that is offered every spring semester. In these courses students are required to work in interdisciplinary teams to evaluate a real-world safety and health problem and propose methods to reduce or eliminate the hazards.

The Continuing Education and Hazardous Substances Programs offered 55 courses in 2008-2009 in AL, TN, FL and MS that were attended by 1207 participants. The CE / HST Program Director was appointed to the NIOSH Workforce Assessment Task Force.

The PPRT funded four applications in 2008-2009. Award recipients were:

- Christina W. Shelton, RN, MSN, Doctoral student (mentor, Dr. Kathleen Brown), UAB, Predictors of Self-Reported Health Status in Exposed Individuals;
- Lloyd R. Wade, Doctoral student (mentor, Dr. Andre Peter Liebenberg), University of Mississippi, Predictive Modeling to Analyze Occupational Injury and Workers Compensation Risk;
- Remona Peterson, Graduate Research Assistant (mentor, Dr. John Wheat), University of Alabama, RMSP-AG H7S Agromedicine Content Study: A Community Participation Approach; and
- Ashwini Katre, MSPH student (mentor, Dr. Rui-Ming Liu), UAB, Ozone and Lung Fibrosis.

The IH-HSAT programs had four doctoral and eight masters students enrolled in the 2008-2009 academic year, and graduated the first student in the new Industrial Hygiene PhD program in 2008. Another PhD student completed her qualifying examination and has made substantial progress in her research, and two new PhD students began their studies in 2008.

The OHN program had seven masters and seven doctoral students enrolled in the 2008-2009 academic year, and graduated four students. The revised PhD curriculum for OHN was fully implemented, and the School of Nursing initiated the new Doctor of Nursing Practice (DNP) degree program in 2008.

The OSE-OIPRT programs had seven masters and eight doctoral students enrolled in the 2008-2009 academic year, and graduated seven students.

The Agricultural Safety and Health began its first year with four enrolled students.

The Deep South ERC continues to be a regional resource for practicing occupational safety and health professionals, other academic institutions, government organizations, and industries in this region. Some examples of our services to these organizations are listed below:

- Almost 70% of the graduates from the Center's academic programs practice in the southeast region.
- The CE / HST programs offer a significant number of discipline-specific and interdisciplinary courses throughout the region, and also present in-house training courses for regional industries. The program collaborates with a number of governmental agencies and professional organizations to co-sponsor additional programs.
- The Center provides materials to help other educational programs teach or promote the field of occupational safety and health, including providing faculty lecturers in courses or seminars, and materials for undergraduate career days.
- The Center provides industry with materials and resources to help develop in-house training courses. We have also presented lectures at regional worksites, provided assistance to state and local health departments in developing workshops on occupational health and safety.
- Center faculty and students conduct research projects to assist regional industries with occupational health and safety problems.
- Some ERC courses are taught in a web-based format and available to practicing OHS professionals and other professional disciplines worldwide.

An important event for the Deep South ERC was the renaming of the PPRT program to the H. Kenneth Dillon – Brian J. Carnahan Pilot Project Research Training Program in honor of Deep South ERC faculty Ken Dillon at UAB and Brian Carnahan at Auburn.

Deep South ERC Enrollment / Graduation for Reporting Period

| Deep South ERC Program | Students | Graduates |
|------------------------|-----------------------|-----------|
| IH / HSAT | 4 doctoral; 8 masters | 2 |
| OHN | 7 doctoral; 7 masters | 4 |
| OSE / OIRP | 8 doctoral; 7 masters | 7 |
| Ag S&H | 4 masters | 1 |